

REMARKS

This is in response to the Office Action mailed February 11, 2003. The Office Action rejected claims 3, 9-12, and 14-20 under 35 U.S.C. § 103(a).

To more clearly claim the novel aspects of the invention, Applicants have amended claim 3, 11, and 17. Claims 3, 9-12, and 14-20 remain pending in the application. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Rejections Under 35 U.S.C. § 103

3. The Office Action rejected claim 3 under 35 U.S.C. § 103 as being unpatentable over Adl (U.S. Patent No. 4,834,479) in view of Nakai et al. (hereinafter Nakai) (U.S. Patent No. 4,345,816).

Applicants traverse this rejection in its entirety.

The Office has the burden under 35 U.S.C. 103 to establish a *prima facie* case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787 (Fed. Cir. 1984).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Applicants submit that neither Adl nor Nakai teach or suggest every claimed limitation. Thus, regardless of whether or not Adl can be combined with Nakai, Applicants submit that such a combination does not teach or suggest every limitation of the claimed invention.

To clarify the claim language, Applicants have amended claim 3 to recite "a tubular outer casing ... having an a substantially cylindrical internal cavity"

As to claim 3, the Office Action states that "Adl discloses ... a tubular casing (fig. 1, ref. 27) with an internal cavity (fig. 1, ref. 32)"

Applicants submit that fig. 1, ref. 27, is a threaded screw-type socket 27 that engages a retainer sleeve 30. (See Adl, Col. 3, lines 11-14). The socket 27 is not an "outer casing" as claimed since it screws into the retainer sleeve 30. As described in the specification and illustrated in Fig. 4 of the present application, an outer casing 14 is one which needs no retainer sleeve.

Additionally, Applicants submit that fig. 1, ref. 32, is a tapered or conical cavity and not a "substantially cylindrical internal cavity" as claimed. (See Adl, Col. 2, lines 3-6). Figure 5 of the present invention illustrates an internal cavity 20 as a hollow interior portion of the tubular casing 14. The Office Action refers to Adl (col. 2, lines 11-16) for support that the "internal cavity" is cylindrical. However, Adl (col. 2, lines 11-16) refers to the other surface of the socket 27 and not the internal tapered or conical cavity 32. Moreover, Applicants submit that Nakai et al. also fails to teach this limitation ("a substantially cylindrical cavity") since there is no cavity or hollow region in the housing (Nakai, fig. 1, ref. 1). That is, all regions of the housing 1 are either solid material or filled with some material (e.g., epoxy 5). Thus, the cited prior art fails to teach this limitation.

Additionally, the Office Action failed to address the claimed limitation of an "opening including a plug region having a greater diameter than the diameter of the internal cavity along at least a part of its length, the plug region extending from the opening to the internal cavity." Applicants submit that neither Adl nor Nakai teach or suggest that the plug region extends from the opening to the internal cavity as claimed. As illustrated in Fig. 5 of the present application, the plug region 22 extends from the opening 18 of the internal cavity to the internal cavity 20. Adl shows the cavity region 32 separated from the plug region 34 by a portion of socket 27 with

only a two holes 39 and 40 extending between these two regions. As illustrated in Fig. 2 of Nakai, there is no internal cavity as claimed since all regions of the housing 1 are filled with materials. Thus, neither Adl nor Nakai teach or suggest that the plug region extends from the opening to the internal cavity as claimed.

Additionally, neither Adl nor Nakai teach or suggest a "pressure-fit plug sealing against a length of the first lead passing through the plug shaped to conform to the plug region and sealing the opening when located therein, whereby increased external pressure compresses the plug forcing it towards the internal cavity increasing the seal around the lead and around the plug region." More particularly, Adl teaches the use of a threaded (screw-type) socket 27 to secure the plug 34, and Nakai teaches a screw-type packing gland 8 to press the seal 7 in place. Neither cited prior art reference teaches a non-threaded securing system where the plug 12 is pressure-fit or secured by friction and where its' sealing capabilities increase with increased external pressure as claimed. Note that the common meaning of a "plug" is a material that covers an opening by a snug fit not the screw-type elements disclosed by Adl and Nakai.

Assuming *arguendo* that Adl in view of Nakai does teach or suggest every limitation of the claimed invention, Applicants argue that there is no motivation to combine the references.

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

The argument in the Office Action ignores the fact that none of the cited references suggest the desirability, or even feasibility, of combining the screw-type fluidblock assembly of

Adl with the epoxy-filled housing of Nakai. In particular, Applicants submit that it is not feasible to reconcile the physical differences between the Adl and Nakai in order to combine them. For example, there is no evident way to substitute or combine the fluidblock system of Adl (threaded socket 27, pig tail adapter 28, retainer sleeve 30, rubber plug 34, keyed bushing 35, and spring washers 54) with the housing of Nakai (metal cylinder 4, epoxy-filled region 3, uncompressible fluid 6, rubber seal 7, screw-type packing gland 8). The physical differences between the teachings of Adl and Nakai make it unfeasible to combine any of their teachings.

For at least the reasons discussed above, Applicants submit that the invention recited in claim 3 is patentably distinguishable over the cited prior art. Applicants respectfully request that the 35 U.S.C. § 103 over Adl in view of Nakai be withdrawn.

4. The Office Action rejected claims 9-12 and 14-20 under 35 U.S.C. § 103 as being unpatentable over Adl (U.S. Patent No. 4,834,479) in view of Nakai et al. (hereinafter Nakai) (U.S. Patent No. 4,345,816) in view of Beyer et al. (hereinafter Beyer) (U.S. Patent No. 6,212,989).

As to claims 9-10, Applicants submit that these claims are allowable due to their dependence on claim 3 which was distinguished above over the prior art.

As to independent claims 11 and 17, Applicants submit that these claims are distinguishable for the same reasons cited above as to independent claim 3. Generally, as discussed in detail above, neither Adl, Nakai, nor Beyer teach or suggest the claimed "tubular outer casing ... having an a substantially cylindrical internal cavity." Additionally, both Adl and Nakai teach screw-type securing elements (see above discussion) not "... end plug having an outer cylindrical surface adapted to **force fit** in the opening of the cylindrical casing" as claimed.

Additionally, Applicants resubmit that it is not physically feasible to combine the teachings of Adl and Nakai as discussed in detail above.

As to claims 12, 14-16, and 18-20, Applicants submit that these claims are allowable due to their dependence on either independent claim 11 or 17 which were distinguished above over the prior art.

For at least the reasons discussed above, Applicants submit that the invention recited in claims 9-12 and 14-20 is patentably distinguishable over the cited prior art. Applicants respectfully request that the 35 U.S.C. § 103 over Adl in view of Nakai and further in view of Beyer be withdrawn.

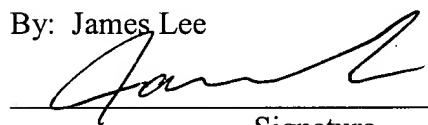
Conclusion

In view of the amendments and remarks made above, it is respectfully submitted that the pending claims are in condition for allowance, and such action is respectfully solicited. Authorization is hereby given to charge our Deposit Account No. 19-2814 for any charges that may be due. Furthermore, if an extension is required, then Applicants hereby request such an extension.

Respectfully submitted,

I hereby certify that this document and fee is being deposited on May 29, 2003 with the U.S. Postal Service as first class mail under 37 C.F.R. §1.8 and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

By: James Lee



Signature

Snell & Wilmer L.L.P.



Julio Loza
Registration No. 47,758
1920 Main Street
Suite 1200
Irvine, CA 92614
Telephone: (949) 253-4924

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